April 18, 2007

MEMORANDUM FOR: Northeast Fisheries Observer Program Observers

FROM: David Potter

Branch Chief, FSB

SUBJECT: Incidental Take Sampling Requirements

As observer coverage levels have increased in the trawl fisheries over the past few years, incidental take data collected by observers have increased our concern with the level of common dolphin, white-sided dolphin and pilot whale interactions. Observer data from the same time period have verified an increase in take rates of harbor porpoise, which has prompted discussion of future regulatory changes to the harbor porpoise area closures. Currently, sea turtle data are being analyzed by a NMFS sea turtle working group and several Science Center biologists. Together they are working to determine what constitutes serious injuries and injuries that are likely to result in mortalities, based on observer data including comments, descriptions and photograph review. In addition, with a National Standard to assess and reduce seabird mortalities, seabird data are currently being analyzed.

All sampling protocols for marine mammals, sea turtles and seabirds should be accomplished. Observers must ensure that they have all the equipment needed for complete sampling and that the captain is aware of your duties. Here are some reminders for you to review before your next trip.

Explain your duties to the captain before a take occurs

Observers should ensure that the vessel owner/operator is aware of the sampling requirements of all marine mammals, sea turtles, and sea birds that are incidentally taken **prior** to the occurrence of a take. Ask the captain if he would please explain the importance of the sampling to the crew members as well. Explaining the value of the sampling may help to promote cooperation in obtaining the samples. If the captain or crew will not allow observers to fully sample when necessary, or they do not bring the animal on board when they seemingly could have, the observers must document that in the comments section of the Incidental Take Log and provide details in the field diary.

Vessel operators/owners are prohibited from impeding the observer from performing their required duties. The Marine Mammal Protection Act is the authority under which observers are allowed to sample marine mammals (CFR 50 section 229.7 (c) (5)) and reads:

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"Marine mammals incidentally killed during fishing operations and which are readily accessible to crew members, must be brought onboard the vessel as biological specimens and retained for the purpose of scientific research if feasible and requested by NMFS personnel, designated contractors, or the aboard observer... Such specimens may be transported on board the vessel during the fishing trip and back to port under this authorization."

Cameras

Observers should have their cameras on them at all times. An incidental take can occur quickly and without notice. If observers are not prepared, they will miss the opportunity to observe and document the event. Observers should exchange their cameras if they have heat or water damage, if the cameras have not been used in more than twelve months or have been exposed to other extreme conditions (i.e., heat, sunlight). Observers should ensure that their equipment is in proper working condition, this includes checking pit tag scanner batteries, ensuring that their temperature probe is operational, and determining that they have enough tags and tagging equipment, among other tools.

Tagging marine mammals

Observers should have a yellow carcass tag and cable tie quickly available to tag dead marine mammals before they are discarded. It is important to mark the animal to ensure that it is identifiable if recaptured. Explain to the captain that it is of value to them to have the animals tagged, so if it is re-caught or washes ashore, the animal will not be counted multiple times. Mortality estimates can be adjusted accordingly by analysts reviewing the data. Check for the presence of existing tags on turtles and sea birds.

DNA samples (first priority for dead marine mammals)

Obtaining a DNA sample from dead marine mammals is absolutely critical to determining stock, species, and sex of the animals. For example, there is no easy way to distinguish between a short-finned and long-finned pilot whale while on deck. A DNA sample can clearly identify the species, and therefore takes can be applied to the appropriate stock assessment. If the stock or species can not be determined, the conservative approach to bycatch estimation would be to apply the mortality to all suspected stocks/species. A clear identification leads to better mortality estimates. A DNA sample can be quickly obtained by collecting a fin clip, or even sloughed skin remaining in a net.

Body temperature

Obtaining body temperature data from a dead marine mammal can greatly support the animal condition determination. Although there are few studies that can demonstrate how a marine mammal's body temperature changes with how long the animal has been dead, it can be an indicator of when an animal died.

Please make sure that you have all the required equipment, cheat sheets, permits, manuals, and guides. Incidental takes not fully sampled and documented as described in the Observer Program's training, biological sampling and program manuals, may result in the observer being placed in pre-probationary status. Thank you for your continued cooperation in adhering to these important protocols.

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If you have any questions or requests please contact Sara Wetmore at 508-495-2227 (office) or 508-642-6005 (cell). Please review the sampling protocols and priorities for marine mammals, sea turtles, and seabirds. The priorities for sampling incidental take are as follows:

Marine Mammals

Live animals:

1. Photograph and return to the water.

Dead animals:

- 1. DNA sample
- 2. Tag
- 3. Identify, noting immediate observable characteristics
- 4. Photograph
- 5. Body Measurements: 7 for cetaceans, 4 for pinnipeds
- 6. Body Temperature
- 7. Sex Determination
- 8. Describe any new and/or healed wounds
- *(bringing dead marine mammals back whole is preferred)

Seabirds

Live animals:

- 1. Identify, noting immediate observable characteristics
- 2. Photograph
- 3. Check for the presence of bands
- 4. Release

Dead animals:

- 1. Identify, noting immediate observable characteristics
- 2. Photograph
- 3. Check for the presence of bands
- 4. Retain whole seabird or feathers*
- *For seabirds (fresh dead only) caught in the area between Maine and North Carolina, all attempts should be made to retain whole specimens. However, if unable, 20-30 breast feathers should be collected.

Sea Turtles

Dead or alive:

- 1. Identify, noting immediate observable characteristics
- 2. Photograph
- 3. Describe any new and/or healed wounds
- 4. Body Measurements (3, curvilinear)
- 5. Identification Criteria (6)
- 6. Biopsy/tissue (genetic) sample: live > 25 cm notch to tip carapace length
- 7. Tag with inconel tag(s) on rear flipper(s):
 1 for dead sea turtles, 2 for live sea turtles > 26 cm notch to tip carapace length
- 8. Scan for PIT tags on flippers and all soft tissues
- *(bringing dead sea turtles in whole is preferred)

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